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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,685	08/16/2001	Yasuhiro Tanaka	P/1071-1435	3334

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EXAMINER

BETTENDORF, JUSTIN P

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 08/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,685

Applicant(s)

TANAKA, YASUHIRO

Examiner

Justin P. Bettendorf

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by applicant's admitted prior art figure 14 and description thereof (hereinafter "AAPA figure 14).

The AAPA figure 14 discloses a non-reciprocal isolator device for the transmission circuit of a portable phone (i.e. inherently includes reception and transmission circuits) that includes a central electrode assembly 240 having a ferrite 270 with central electrodes 271-273 separated by insulating sheets (i.e. "films") with a metallic case 250. Permanent magnet 260 is shown (see page 1). Electrode 276 is provided along the bottom of the ferrite 270. Figure 14 shows the connecting electrodes for 271-273 located on the sides of the ferrite 270 (i.e. "margins").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA figure 14 in view of Kubota et al. United States Patent No. 5,644,107.

The AAPA figure 14, as noted above, discloses a laminated structure of a ferrite substrate 270 with insulating sheets (i.e. "films") and electrodes 271-273. However, the AAPA figure 14 does not disclose a method including cutting an assembly from a ferrite motherboard.

The Kubota et al. reference teaches that a multilayer composite electronic component may be made by the method of starting from a laminated motherboard and slicing along the via holes to form electrodes. This method is considered equivalent to forming individual elements separately (see col. 1, lines 10-60).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to have manufactured the device of AAPA figure 14 by forming a motherboard laminate and then cutting into individual units as taught by Kubota et al. instead of forming individual units because such a method of manufacturing would have been considered a mere substitution of art-recognized equivalent manufacturing methods that would have advantageously facilitated mass production thereby reducing manufacturing costs, as would have been well known.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Takane et al. United States Patent No. 6,121,851 discloses forming a non-reciprocal device by layering insulating sheets and electrodes with a ferrite.

b. Lingel et al. United States Patent Application Publication No. US 2002/0089388 A1 discloses a circulator formed by cutting individual units from a motherboard (see claim 15).

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c. Fields et al. United States Patent No. 4,821,007 teaches forming individual units from a laminated motherboard in order to have economical manufacture of large numbers of identical parts (abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin P. Bettendorf whose telephone number is (703) 308-2780. The examiner can normally be reached on 6:00-3:30 (M-F, 1st Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on (703) 308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Justin P. Bettendorf
Primary Examiner
Art Unit 2817

jpb
August 12, 2002